

OBJETIVOS: analizar la costo-efectividad y costo-utilidad de trastuzumab-emtansine, para el manejo de pacientes con cáncer de mama HER2 positivo avanzado en tratamiento previo con trastuzumab y un taxano por separado o en combinación, para el contexto venezolano. **METODOLOGÍAS:** mediante la adaptación de un modelo económico de cadenas de Markov, que simula la historia natural de la enfermedad, se evaluó el uso de la terapia trastuzumab-emtansine para pacientes con cáncer de mama HER2 positivo previamente tratados con trastuzumab y un taxano solos o en combinación. Los datos clínicos incluidos en el modelo fueron obtenidos del estudio EMILIA. Los desenlaces evaluados fueron años vida salvados, años de vida libre de progresión y años de vida ajustados por calidad de vida, en un horizonte de diez años, en ciclos mensuales, con una tasa de descuento del 5%. Los costos provienen, en bolívares fuertes, de datos del ministerio de salud venezolano y de los manuales tarifarios. **RESULTADOS:** se demuestra una efectividad superior de trastuzumab-emtansine frente a sus comparadores, en todos los desenlaces evaluados, los años de vida salvados fueron 3,00 con trastuzumab-emtansine frente a 2,30 con lapatinib/capecitabina, 1,87 con trastuzumab/capecitabina y 1,76 con capecitabina. Se evidencia una relación de costo-efectividad frente a trastuzumab/capecitabina en algunas iteraciones. Frente a esta última combinación el análisis de Montecarlo mostró que en el 1,5% de los casos trastuzumab-emtansine es dominante y el promedio de costo por año de vida salvados ajustado por calidad se ubica como costo-efectivo sobre el umbral definido. **CONCLUSIONES:** teniendo en cuenta los pocos pacientes con el diagnóstico, el impacto per cápita del uso de la adición de trastuzumab-emtansine acumulado a tres años es de \$0,15 y debería ser tenido en cuenta para la inclusión en el sistema de salud venezolano.

PCN43

ANÁLISIS DE MINIMIZACIÓN DE COSTOS DEL USO DE TRASTUZUMAB SUBCUTÁNEO FRENTE A TRASTUZUMAB INTRAVENOSO EN EL TRATAMIENTO DE CÁNCER DE MAMA TEMPRANO EN MUJERES CON HER2 POSITIVO PARA VENEZUELA

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OBJETIVOS: determinar el costo del uso de trastuzumab subcutáneo frente a trastuzumab intravenoso para el tratamiento del cáncer de mama temprano en pacientes adultas con HER2 positivo. **METODOLOGÍAS:** se desarrolló un análisis de minimización de costos en un horizonte temporal de un año, bajo la perspectiva del estado venezolano. Dentro del estudio se consideraron todos los costos asociados a la aplicación del medicamento, así como las frecuencias de uso de la tecnología de análisis. De acuerdo con el comportamiento de la enfermedad, se tuvieron en cuenta tres escenarios de uso: antes de la cirugía, después y contemplando el uso en los dos momentos. Se planteó un análisis de sensibilidad univariado realizando aumentos de precio de tecnología en 5 y 10%; los costos utilizados fueron en bolívares fuertes. Adicionalmente, se realizó un análisis de impacto presupuestal para determinar el efecto que tendría su utilización teniendo en cuenta una tasa de remplazo del 30%. **RESULTADOS:** trastuzumab subcutáneo mostró un ahorro en los tres escenarios frente a trastuzumab intravenoso: antes de cirugía (\$20.851,26), después de cirugía (\$21.513,6) y uso en los dos momentos (\$24.162,96). El análisis de sensibilidad mostró que al realizar un aumento del 5% en el precio todavía es menor que su comparador. Dentro del análisis de impacto presupuestal trastuzumab subcutáneo mostró un ahorro de \$8.236.911,87, lo que representaría para el sistema de salud venezolano un ahorro per cápita de \$0,27. **CONCLUSIONES:** los resultados obtenidos dentro del estudio mostraron que la utilización de trastuzumab subcutáneo, en comparación con la versión intravenosa, genera menos costos asociados, evidenciando posibles ahorros, los cuales se reflejan dentro del impacto presupuestal. Debido a lo anterior, esta tecnología podría ser una opción a tener en cuenta para su posible incorporación al sistema de salud venezolano.

PCN44

EVALUACION ECONOMICA DE LEUPRORELINA 45 MG EN EL TRATAMIENTO DE CÁNCER DE PRÓSTATA AVANZADO

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OBJETIVOS: Realizar una evaluación económica completa del uso de leuporelina 45mg en el tratamiento de cáncer de próstata avanzado, en comparación con busserelina, goserelina y las otras formulaciones de leuporelina incluidas en el Cuadro Básico y Catálogo de Medicamentos del Sector Salud, desde el punto de vista institucional. **METODOLOGÍAS:** Se desarrolló un estudio de evaluación económica completa de tipo minimización de costos, con un horizonte temporal de dos años, desde la perspectiva de las instituciones públicas del sector salud en México. Las alternativas a comparar versus leuporelina 45 mg fueron leuporelina (3.75 mg, 7.5 mg, 11.25 mg, 22.5 mg), busserelina 9.45 mg y goserelina (3.6 mg y 10.8 mg). El costo unitario de la consulta del especialista corresponde a los costos unitarios publicados por el IMSS. El precio del leuporelina 45 mg fue proporcionado por Asofarma, y los costos restantes se obtuvieron de los precios acordados en la Comisión Coordinadora para la Negociación de Precios de Medicamentos y Otros Insumos para la Salud para el 2015. Para comprobar la robustez del modelo se realizó un análisis de sensibilidad univariado del precio de leuporelina 45 mg de +2% y +4%, y uno de tipo escenario en el que sólo se costó el agonista de LHRH. Se aplicó una tasa de descuento del 5% a los resultados del modelo. **RESULTADOS:** Leuporelina 45 mg es el agonista de LHRH de menor costo disponible en las instituciones públicas del sector salud en México, generando ahorros desde \$ 2,542.16 MXN hasta \$ 45, 611.06 MXN. Estos resultados se confirmaron mediante los análisis de sensibilidad realizados. **CONCLUSIONES:** Leuporelina 45 mg es una estrategia costo-ahorradora en el tratamiento de cáncer avanzado de próstata cuando la orquiectomía o la administración de estrógenos no es aceptada, en comparación los agonistas de LHRH disponibles en las instituciones de salud del sector público de México.

PCN45

ANÁLISIS COSTO-UTILIDAD DEL MANEJO INTEGRAL DE LAS PACIENTES CON CARCINOMA DE SENO TRATADAS CON RECONSTRUCCION DE SENO INMEDIATA VS. DIFERIDA EN COLOMBIA

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OBJETIVOS: Evaluar la costo-utilidad para Colombia del tratamiento integral del cáncer mamario temprano con reconstrucción mamaria inmediata, comparado con reconstrucción mamaria diferida. **METODOLOGÍAS:** Se construyó un modelo de árbol de decisiones, horizonte temporal de un año, desde la perspectiva del tercero pagador, con datos de costos del Manual del Instituto de Seguros Sociales 2001+ ajuste de 30% según metodología propuesta por el Instituto de Evaluación Tecnológica en Salud y modelo de facturación del Centro Javeriano de Oncología-Hospital Universitario San Ignacio. Los datos de probabilidades de transición y utilidades fueron obtenidos de médicos especialistas, pacientes y literatura médica. Se hicieron análisis de sensibilidad univariado y probabilístico. **RESULTADOS:** Los costos esperados por paciente son COP \$26.710.605 (USD 11.165) y COP \$26.459.557 (USD 11.060) para la reconstrucción inmediata y diferida, respectivamente. En comparación con la reconstrucción diferida, la reconstrucción mamaria inmediata, genera un costo incremental de COP \$251.049 (USD 105). El tratamiento integral con reconstrucción mamaria inmediata genera 0.75 AVACs, mientras la diferida genera 0.63 AVACs, con una RCU de COP \$2.154.675 por AVAC (USD 901). **CONCLUSIONES:** El costo por AVAC ganado no supera el umbral de aceptabilidad sugerido de un PIB per cápita, sin importar si la reconstrucción se hace de forma inmediata o diferida. Los costos durante el primer año de la reconstrucción mamaria son similares, pero la utilidad percibida por pacientes y según la literatura es mayor cuando se hace reconstrucción inmediata. La decisión quirúrgica, debe ser tomada por una paciente adecuadamente informada.

PCN46

EVALUACION DE COSTO-UTILIDAD DEL USO DE CETUXIMAB COMO ÚLTIMA LÍNEA DE TRATAMIENTO DEL CÁNCER COLORRECTAL METASTÁSICO

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OBJETIVOS: Asesorar sobre la inclusión de Cetuximab al Formulario Terapéutico de Medicamentos, para el tratamiento del cáncer colorrectal metastásico como tratamiento de última línea. **METODOLOGÍAS:** Fue realizada una evaluación costo-utilidad mediante un modelo de Markov, considerando que los pacientes cursan la enfermedad por estados de salud bien definidos y mutuamente excluyentes. El modelo asume una cohorte homogénea de pacientes, los cuales inician tratamiento con Cetuximab o mejor tratamiento de soporte (BSC). La perspectiva de la evaluación fue desde la perspectiva del Sistema Nacional de Salud, por lo que fueron incluidos los costos directos para el sistema y años de vida ajustados por calidad como resultados en salud. **RESULTADOS:** En el caso base la estrategia de tratamiento con Cetuximab produce un mayor beneficio comparado con el BSC (aumento de QALYs de 0,25). Pero la relación costo-utilidad incremental es de \$U 4162051 (USD 190483) por QALY respecto al BSC. Fueron evaluados varios escenarios posibles y su impacto en la relación costo-utilidad incremental (ICER), incluyendo variaciones de las utilidades y costo pero en ninguno de los escenarios planteados la estrategia Cetuximab resultó ser costo-efectiva. **CONCLUSIONES:** Los resultados muestran que para el caso base o cualquiera de los escenarios ensayados en esta evaluación, la inclusión de Cetuximab al Formulario Terapéutico de Medicamentos no es una estrategia de tratamiento costo-efectiva para el tratamiento del cáncer colorrectal metastásico en última línea.

PCN47

FEDERAL PURCHASES OF IMATINIB MESYLATE, TRASTUZUMAB AND L-ASPARAGINASE IN BRAZIL, 2004-2013

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OBJECTIVES: To analyze the purchase profile of antineoplastic drugs imatinib mesylate, trastuzumab and L-asparaginase by Brazilian federal agencies and the behavior of acquisitions in terms of quantities and prices. **METHODS:** Exploratory study of purchases of imatinib mesylate 100 mg and 400 mg, trastuzumab 440mg vial and L-asparaginase 10.000UI vial performed between January/2004 and December/2013. Records were extracted from the Integrated General Services Administration federal database. Quantity, unit price, purchase date, type of purchase (regular or lawsuits) and federal buyer agency were analyzed. The annual weighted average unit price (WAUP) of each medicine was calculated. Current values were corrected by the National Consumer Price Index (IPCA) to December 2013. **RESULTS:** The purchased quantities of imatinib and trastuzumab increased progressively each year and their WAUP showed a decreasing trend in all federal agencies. The Ministry of Health (MoH) was the main buyer. Reductions of WAUP were observed between 2009/2010 for imatinib even before the centralization of purchase by MoH in 2011. The incorporation of trastuzumab by the Brazilian Health System (SUS) and centralized purchases by the MoH (2012) resulted in a 57% reduction in WAUP. Prices and quantities of L-asparaginase varied between government agencies. The untoward 117% price rise in the centralized purchase by MoH (2013) may reflect shortages in the world market. Surprisingly there were no purchases related to health litigation for this medicine in the entire period. **CONCLUSIONS:** Acquisitions presented increasing volumes of purchases and reductions in WAUP, with the exception of L-asparaginase. The centralization of procurement of imatinib and trastuzumab by MoH seems to justify the observed price reductions and reinforces the use of federal purchasing power in pricing negotiations to improve access to medicines in SUS.

CANCER – Patient-Reported Outcomes & Patient Preference Studies

PCN48

RELATIONSHIP BETWEEN NON COMPLIANCE TO CLAIM MEDICATION IN PHARMACY AND INCIDENCE OF HOSPITALIZATIONS IN PATIENTS WITH BREAST CANCER

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OBJECTIVES: evaluate the relationship between the non compliance to the claim of medication and incidence of hospitalization in patients with breast cancer in oral antineoplastic therapy. **METHODS:** case-control study in patients with breast cancer, that claimed their medicines in pharmacies between January of 2012 and December 2014. Was defined as a case patients that during the observation period claimed their drugs in pharmacy <95% of the time. The sample size was calculated for a proportion of cases exposed 40% an OR of 3.7, a relation case-control 1:2, a 95% confidence and an potency 80%. The final sample was composed of 40 cases and 80 controls (randomly selected from the same cases population). For univariate analysis was used absolute and relative frequencies and summary measures. For binary analysis contingency tables, chi-square tests. The statistical measure of force used was the Odds Ratio. **RESULTS:** the proportion of hospitalized patients who did not comply with the claim of medicines in pharmacy was 45.7% (p<0.06). The non adherent patients were hospitalized 2.14 times more than compliant patients, (OR 2.14 [IC95% 0.94-4.8]). If we avoided the non compliance claim of medications in pharmacies, we would avoid 24% of hospitalizations (FA 24% [IC95% 5.4%-5.7%]). **CONCLUSIONS:** the non compliance to claim medication in pharmacy is an influence factor increased in the incidence of hospitalization in breast cancer patients.

PCN49

HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH LOCALIZED PROSTATE CANCER USING EQ- 5D- 3L

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OBJECTIVES: New treatments in prostate cancer intend to have more precise techniques to reduce side effects and improve quality of life. The aim of this study was to estimate health related quality of life of patients with localized prostate cancer undergoing robot-assisted laparoscopic prostatectomy or conventional open prostatectomy. **METHODS:** Prospective cohort study was conducted from March 2014 to January 2015. All patients that were diagnosed with localized prostate cancer answer the EQ- 5D 3L and then went to robot-assisted laparoscopic prostatectomy or conventional open prostatectomy as recommended by their doctor. They also answered the questionnaire at hospital discharge and at six month follow-up using, in a reference cancer hospital in Rio de Janeiro. **RESULTS:** Median age was 60.06 years, prostate specific antigen in the open surgery was 9.25±4.59 ng/dl and 8.15±4.34 ng/dl in the robotic surgery, blood loss was higher in the open surgery. Among the 18 patients in the open surgery and the 27 in the robotic surgery the most significant result was the loss of quality of life in the group of open surgery at hospital discharge with less 10 points in the VAS and less 10.9% in utility (statistically and clinically significant) comparing to baseline. The difference between the two techniques is 11% when observed the loss in the VAS of the open surgery group and the gain in the robotic surgery. At six months the change in quality of life was not significant when compared to baseline, suggesting that this is not sustained over time. **CONCLUSIONS:** This study helps in discussion about the benefits of robotic prostatectomy over the open procedure. Even with a significant difference between the two techniques in the immediate postoperative period favoring robotic surgery, this difference was not maintained at six months, which may not justify the higher costs of this procedure.

PCN50

BODY IMAGE AND SEXUAL PROBLEM IN YOUNG BREAST CANCER PATIENTS IN SOUTH INDIAN POPULATION

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OBJECTIVES: The purpose of this study was to determine the frequency of body image and sexual problems after 12 month of follow up among women diagnosed with breast cancer at age 35 or younger. Types of breast cancer treatment effect physical appearance as loss of the body part, disfigurement, scars or skin changes. The goal of this paper is to comprehend the body image and sexual distress of newly diagnosed younger survivors. **METHODS:** A multi-ethnic population-based sample of 72 out of 124 women aged 21–35 who were married or in a stable unmarried relationship were interviewed with in situ, or regional breast cancer. The women participating in this study were underwent treatment from 2003 to 2013 at 2 different hospitals located in south India. **RESULTS:** Body image and sexual problems were experienced by a substantial proportion of women after diagnosis or treatment. Different type of treatment patterns were used as 59 (81.94%) women underwent surgery, 39 (54.1%) were treated with CMF chemotherapy, 54 (72.2%) women underwent hormonal therapy and remaining with radiotherapy. The Hopwood Body Image Scale was used for the assessment of the body image perception which shown less physically attraction in most of the patients with self-consciousness, seeing themselves naked in mirror and dissatisfied with scars on their body. The Female Sexual Distress Scale (FSDS) was used to assess the sexual distress in women with breast cancer. The mean score was 24.4 (47%) which relatively shows higher sexual distress with the major sexual problem; distress about sex life, Frustration by the sexual problems, Dissatisfaction with sex life and inferiority because of sexual problem among the women. **CONCLUSIONS:** Difficulties related to body image and sexuality were common and occurred soon after surgical and adjuvant

treatment. Addressing these problems is essential to improve the quality of life of young women with breast cancer.

PCN51

DIFFERENCES IN PHARMACISTS' SKIN CANCER PREVENTION STRATEGIES BY AGE AND GENDER

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OBJECTIVES: The purpose of this study is to describe pharmacists' personal skin cancer prevention strategies and to determine if there were differences based on age and gender. **METHODS:** Pharmacists registered and living in Arizona with an email address with the State Board of Pharmacy were eligible for the study. A questionnaire was developed based on questions from the National Health Interview Survey. The questionnaire included preventive strategies, knowledge, clinical outcomes, and demographic questions. The questionnaire was administered by using an electronic, on-line survey form. Two emails with a link to the questionnaire site were used to recruit participants. Prevention strategies assessed included the use of sunscreen, protective clothing (wearing a hat, a cap, long-sleeved shirt or pants), or seeking shade. **RESULTS:** A total of 261 pharmacists responded; their average age was 44.9(SD = 13.7) and there were 167 women and 94 men. Men and women used a similar number of strategies (mean = 2.0, SD = 1.3; mean = 1.9, SD = 1.1, respectively; p = 0.058), however, the types of strategies used differed. Men were more likely to wear a baseball cap (p<0.001) and a long sleeved shirt(p=0.018). Women were more likely to use sunscreen(p=0.001). Older pharmacists(>40) were more likely to wear a hat than younger pharmacists (p<0.001). Clinical outcomes did not differ by gender but did differ by age. Older pharmacists were more likely to have had a sunburn with blisters than younger pharmacists(p=0.004) and older pharmacists were more likely to report a diagnosis of a precancerous skin lesion (p<0.001) or a diagnosis of skin cancer(p = 0.004). **CONCLUSIONS:** Men and women pharmacists used a similar number of skin cancer prevention strategies but women were more likely to use sunscreens. Older pharmacists were more likely to use protective clothing and to report a diagnosis of skin cancer.

PCN52

ACCESS INEQUALITIES BETWEEN PRIVATE AND PUBLIC INSURANCE AMONG CANCER PATIENTS: RESULTS OF A NATIONAL SURVEY IN BRAZIL

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OBJECTIVES: An estimated 70% of the Brazilian population is covered exclusively by the public healthcare system; consequently, many patients with cancer must rely on few public institutions for oncology care. This study investigated the impact of insurance type on access, health-related quality of life (HRQoL), mood and sleep related outcomes for real-world cancer patients in Brazil. **METHODS:** Data came from the 2011 (n=12,000), 2012 (n=12,000), & 2014 (n=9,082) Brazil National Health and Wellness Survey, an internet-based general health survey representative of the general population in age and gender. Among 33,082 respondents, 1,019 reported a cancer diagnosis. Respondents were categorized into public insurance (n=405) or private insurance (n=614). Initial analyses used one-way ANOVAs and chi-squares, and generalized linear models were used to control for demographic and health characteristics (e.g., income) to isolate differences in HRQoL, mood and sleep disorders, and healthcare resource use according to insurance type. **RESULTS:** Those with private insurance were more likely to be white (76.9%), have completed their degree (57.5%), have annual household income ≥R\$6501 (49.8%), be obese (23.9%), and drink alcohol (69.4%). Those on private insurance were also more likely to report having generalized anxiety disorder (9.0% vs. 4.7%) and overall sleep issues (50.2% vs. 43.5%) than those on public insurance. After controlling for covariates, those with private insurance reported a higher mean number of doctor visits (9.87 vs. 6.58), emergency room visits (1.05 vs. 0.57), and hospitalizations (0.54 vs. 0.32). There were no differences on HRQoL. **CONCLUSIONS:** Lower resource use among those on the public system indicates disparities in healthcare access among cancer patients in Brazil. HRQoL was not associated with insurance type, while mood and sleeping disorders were more common among those with private insurance. Further research is needed to understand why inequality of access is not reflected in HRQoL decrements in this population.

CANCER – Health Care Use & Policy Studies

PCN53

IDENTIFYING CURRENT TREATMENT PRACTICES IN NON-HODGKIN'S LYMPHOMA

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OBJECTIVES: Treatment for Non-Hodgkin's Lymphoma (NHL) is highly dependent on the subtype of NHL. Indolent Lymphomas (Follicular Lymphoma (FL), Waldenstrom's Macroglobulina (WM)) are slow-growing and are generally only treated once the patient becomes symptomatic. Aggressive lymphomas (Diffuse Large B-Cell Lymphoma (DLBCL), Mantle Cell Lymphoma (MCL)) have a poor prognosis, and treatment is expected to start at diagnosis. The objective is to quantify the distribution of NHL subtypes and then compare drug treatment practices across each subtype. **METHODS:** The study used ONCO-CAPPS, a proprietary database of patient chart abstractions collected through regular surveys of physician panels. The data includes demographic details, disease markers, and a summary of the patients' cancer treatments from the time of diagnosis. Data were collected each quarter in 2014 and used to categorize patients with NHL based on subtype and document their sequence of treatments. **RESULTS:** Out of all NHL patients being treated, 45% had FL, 33% had DLBCL, 7% had MCL and 4% had WM. The remaining 11% had other forms of NHL. The proportion of NHL patients with FL was found to